

## **REMARKS/ARGUMENTS**

The Examiner rejected Claims 1-28 under 35 U.S.C. § 103(a) as being unpatentable over combinations of Axtell (Patent Number 6,439,697), Furukawa (Patent Number 6,474,782), Lambertson (Patent Number 5,544,103), and Thakoor (Patent Number 4,876,668). Claims 1, 10, 13, 22, 23 and 24 were amended but in substance they are substantially the same as previously presented claims. Claims 9 and 21 are cancelled because their substance has been moved to their independent claim.

Applicant respectfully submits that Claims 1-8, 10-20, and 22-28 as amended are allowable for the reasons set forth below.

### **Suggestion to Withdraw Finality of Rejection**

Claims 24 and 25 were added by the prior amendment. Both of these claims covered the invention illustrated by Fig. 10 in which the nonvolatile memory on the printhead communicates with a controller. While claims 24 and 25 were rejected over prior art in the Final Office Action, there was no comment as to the “controller” in claims 24 and 25, and the prior art did not disclose the controller as claimed and shown in Fig. 10. It would appear appropriate to withdraw the finality of the rejection or to allow claims 24 and 25 under these circumstances.

### **Claims 1-22**

In Claims 1-22, claims 1 and 13 are independent. In both independent claims, language from dependent claims has been added to the independent language. Thus the scope of the independent claims is now the same as former claims 9 and 21 which have been cancelled.

The language added to claim 1 is:

wherein the memory matrix is erasable by ultraviolet light and further comprising a layer disposed adjacent the programmable memory matrix, said layer having properties sufficient to block ultraviolet light having a wavelength below about 400 nanometers.

The language added to claim 13 is:

wherein the memory matrix is erasable by ultraviolet light and further comprising a photoresist layer disposed adjacent the programmable memory matrix, said photoresist layer having properties sufficient to block ultraviolet light having a wavelength below about 400 nanometers.

It is respectfully submitted that the combination defined by Claims 1 and 13 when considering the added limitation is not disclosed or suggested by the cited art.

The Office action rejected claims 9 and 21 (now 1 and 13) based on a combination of 3 references. Furukawa was the base reference. Lambertson was cited to show a memory that was erasable by UV light, and Axtell was added to show a plate that would block UV light. One problem with this combination is the addition of Axtell without sufficient motivation to substitute the plate of Axtell for anything in the other devices of the other references.

The examiner is well aware that one may not pick and choose elements from a variety of sources and combine those elements with the benefit of hindsight from the claimed invention. Instead there must be a motivation to combine the elements. The office action recognizes this law by citing a motivation, namely, that adding the plate of Axtell would be motivated by the need to protect the memory from UV light.

There are two problems with this argument. First, it assumes that UV protection is necessary or desirable. Neither reference teaches either. The undersigned has found nothing in Lambertson to provide or suggest UV protection. The second problem is that the Examiner assumes that the plate of Axtell blocks UV light. There is no indication in Axtell that the plate 13 blocks UV light. In Axtell, UV is mentioned only once and that reference does not teach blocking UV light. At column 1, line 52 Axtell states that certain prior art devices have ink barriers that are cured by UV light. That is not a teaching of blocking UV to protect a memory device. It does not even mention a memory in the context of UV and it does not teach that anything blocks UV light.

In the portion of the patent cited by the examiner (column 4) it mentions a plate 13 made from a polymer that may be made with or without nickel plating. This section of the patent does not teach or suggest that the plate needs to block UV light. A polymer may not block UV light, and even nickel plated polymer may not block UV light. For example sun glasses, windows, and windshields may be made out of polymers with metal platings that transmit light, and depending on the polymer and the density of the plating, UV light could be transmitted.

Also, even if you assume that the plate of Axtell would block UV light, there is still no suggestion to combine. Without a suggestion of a need to block UV, there is no incentive to combine. Again, however, it is not appropriate to assume that the Axtell plate would block UV because it does not make a teaching with regard to the UV blocking characteristics of plate 13.

In view of the above, it is respectfully suggested that the independent claims 1 and 13 as amended and their dependent claims are allowable, and allowance of claims 1-22 is requested.

#### **Claims 23 -28**

Claims 23 - 28 were rejected under Section 103 over Furukawa in view of Lambertson. This rejection is respectfully traversed. Claim 24 has been cancelled but the subject matter of claim 24 (the controller) has been moved to claim 23. The references do not suggest an external controller communicating with a micro-fluid ejecting device as now set forth in claim 23, and as originally set forth in claim 24. For this reasons, claim 23 should be allowed.

Claim 24 is dependent on claim 23 and further requires direct communication between the external controller and the memory matrix. (This requirement was originally in claim 25, now cancelled.) Since this feature is not taught or suggested by the cited references, Claim 24 should be allowed.

Furukawa discloses a printhead with a non-volatile memory but there is no disclosure that the memory communicates with a printer controller or any other controller external to the printhead.

Lambertson discloses programmable nonvolatile memory devices. Lambertson, Col. 1, lines 9-10. These two references combined do not suggest the combination of claims 23 and 24 since there is no suggestion of an external controller, such as a printer controller, communicating with a micro-fluid ejecting device.

Having an external controller in communication with a memory on a micro-fluid ejecting device provides speedy communication of information that may be needed to run devices external to the ejecting device, such as a printer, and direct communication as required by claim 24 allows even faster communication.

For the reasons stated above, claims 23 and 24 should be allowed, and Claims 26 – 28 add additional important subject matter to Claim 23 and likewise should be allowed.

### **Conclusion**


In view of the foregoing, it is believed that the above-identified patent application is in a condition for the issuance of a Notice of Allowance. Such action by the Examiner is respectfully requested.

**In the event this response is not timely filed, Applicants hereby petition for the appropriate extension of time and request that the fee for the extension, along with any other fees which may be due with respect to this paper, be charged to our Deposit Account No. 12-2355.**

Respectfully submitted,

LUEDEKA, NEELY & GRAHAM, P.C.

By:

  
Andrew S. Neely  
Registration No. 28,979

Date: June 30, 2006  
P.O. Box 1871  
Knoxville, Tennessee 37901  
(865) 546-4305